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EXAMINER	
RASHID, DAVID	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/529,316	AZUMA ET AL.	
	Examiner	Art Unit	
	DAVID P. RASHID	2624	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *21 January 2009*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1 and 9-22* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,2,4,5 and 7-22* is/are rejected.

7)☒ Claim(s) *3 and 6* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Table of Contents

Amendments & Claim Status

[1] This office action is responsive to Amendment in Response to Final Office Action received on September 23, 2008. Claims 1-22 remain pending; claims 17-22 new.

As indicated in the Examiner Interview Summary Record filed Jan. 14, 2009, the Office Action dated Oct. 21, 2008 is hereby regarded non-final.

Response to Arguments

[2] Applicant's Remarks filed Jan. 14, 2009 with respect to claims 10, 12-13, and 15-16 have been respectfully and fully considered, but are not found persuasive.

Summary of Remarks regarding Rejections under 35. U.S.C. § 102

> In addition, claim 10 recites "extracting a predetermined feature from the band- limited image data; and recognizing whether the single image has been captured from a photocopy of a living eye based on data of the extracted feature." As presented above, Daugman at best appears to show monitoring the pupillary diameter over time to determine if the image is captured from a living eye or a photograph of a living eye. Thus, Daugman fails to disclose determining if an image is captured for a living eye or a photocopy of a living eye based on extracted features from the band-limited image data.

Remarks at 11.

However, Daugman performs band limitation ("quadrature bandpass filters" in 3:52-55; fig. 3; fig. 4) to the whole image data (the qaudrature bandpass filters are applied to the whole image) of the single image (fig. 1, item 10; e.g., fig. 2); and extracting a predetermined feature (fig. 4c to generate the code when fig. 4b Gabor filter above or below 0 creating the Hamming distance) from the band-limited image data. Monitoring papillary diameter over time to determine if the image is captured from a living eye or a photograph of a living eye is irrelevant as there is no time constraint to what is being analyzed in claim 10.

[3] Applicant's Remarks filed Jan. 14, 2009 with respect to claims 1-2, 4-14, and 16 have been respectfully and fully considered, and found persuasive.

Summary of Remarks regarding Rejections under 35. U.S.C. § 102

> Applicant submits that the specific texts and figures of Daugman referred to by the Examiner in the rejection of claim 1 do not appear to concern judging whether a single image is captured from a living eye or a photocopy of a living eye. Rather, those texts and figures appear to relate to determining whether the person in front of the camera is an imposter or the real person he claims to be (i.e., the identity of the person).
>
> . . .
>
> Thus, it does not determine whether or not the images have been captured from a photocopy of a living eye based on the image data of a single image, let alone making that determination based on static textual roughness of the single image. Applicant submits that "static textual roughness" requires that the roughness be independent of time. Thus, the changes of pupillary diameter over time can not anticipate the claimed static textual roughness.

Remarks at 10-11.

Applicant's arguments with respect to the rejections of claims 1-2, 4-14, and 16 under 35 U.S.C. § 102 have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, new grounds of rejection are made in view of Min et al.

Claim Rejections - 35 U.S.C. § 101

[4] In response to the Amendments to the Claims received on Jan. 14, 2009, the previous § 101 rejections are withdrawn.

Claim Rejections - 35 U.S.C. § 102

[5] The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Min et al.

[6] **Claims 1, 17**, and **19-21** are rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 6,760,467 (filed Mar. 21, 2000, hereinafter "Min et al.").

Regarding **claim 1**, *Min et al.* discloses a counterfeit eye discrimination method (fig. 3) comprising the steps of:

capturing, by a capturing device (fig. 1, item 2) , a single image from a living eye (fig. 1, item 1) or a photocopy of a living eye ("[h]owever, in the case that a photograph is taken. . ." at 3:41-44) that is positioned outside (fig. 1, items 1 and 2 are separate) the capturing device;

receiving image data of the single image (fig. 2) and storing the image data on a memory device (fig. 1, item 3); and

detecting presence or absence of static textual roughness (fig. 2 absent items LED-L' and LED_R' is the presence of static textual roughness) in the single image (fig. 2) by image processing (fig. 1, item 3; fig. 3, item S7) to the image data; and

wherein the single image (fig. 2) is judged to have been captured from a photocopy of a living eye ("[h]owever, in the case that a photograph is taken. . ." at 3:41-44) when the static textual roughness (fig. 2 absent items LED-L' and LED_R' is the presence of static textual roughness) is detected in the image.

Presence of items LED-L' and LED_R' at fig. 2 in the single image is composed of less static textual roughness (those pixel values of the pupils reflecting light from items LED_L and LED_R at fig. 1 would most consistent, and less volatile – e.g., all pixels values being white at items LED-L' and LED_R') in those specific areas than if they didn't exist in a photograph put in front of item 2 at fig. 1.

Regarding **claim 16**, *Min et al.* discloses an image discrimination method (fig. 3) comprising the steps of:

capturing a single image from a an object (fig. 1, item 1) or a printed matter imitating the object ("[h]owever, in the case that a photograph is taken. . ." at 3:41-44);

receiving image data of the single image (fig. 2) and storing the image data on a memory device (fig. 1, item 3); and

detecting presence or absence of static textual roughness (fig. 2 absent items LED-L' and LED_R' is the presence of static textual roughness) in the single image (fig. 2) by image processing (fig. 1, item 3; fig. 3, item S7) to the image data; and

wherein the single image (fig. 2) is judged to have been captured from a printed matter imitating the object ("[h]owever, in the case that a photograph is taken. . ." at 3:41-44) when the static textual roughness (fig. 2 absent items LED-L' and LED_R' is the presence of static textual roughness) is detected in the image.

Presence of items LED-L' and LED_R' at fig. 2 in the single image is composed of less static textual roughness (those pixel values of the pupils reflecting light from items LED_L and LED_R at fig. 1 would most consistent, and less volatile – e.g., all pixels values being white at items LED-L' and LED_R') in those specific areas than if they didn't exist in a photograph put in front of item 2 at fig. 1.

Regarding **claim 17**, *Min et al.* discloses further comprising performing an authentication operation (fig. 3, item S10) in response to the judgment (fig. 3, item S9)

Regarding **claim 19**, *Min et al.* discloses wherein the static textual roughness (fig. 2 absent items LED-L' and LED_R' is the presence of static textual roughness) is on the surface of the photocopy ("[h]owever, in the case that a photograph is taken. . ." at 3:41-44 wherein the static textual roughness would be on the surface).

Regarding **claim 20**, *Min et al.* discloses wherein the static textual roughness (fig. 2 absent items LED-L' and LED_R' is the presence of static textual roughness) has characteristics indicating association with a photocopy produced by an ink or toner on a printer output (the image picked up by a photocopy would include characteristics from the device that produced that photocopy, which would include a printer; e.g., printer resolution of 0 would create a blank image that the method would regard as falsification).

Regarding **claim 21**, *Min et al.* discloses wherein the static textual roughness (fig. 2 absent items LED-L' and LED_R' is the presence of static textual roughness) is of intensity data (brightness values being picked up) of the single image (fig. 2).

Daugman

[7] Claims 10-14 are rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,291,560 (issued Mar. 1, 1994, hereinafter "Daugman").

Regarding **claim 10**, *Daugman* discloses a counterfeit eye discrimination method (fig. 1) comprising the steps of:

capturing a single image (fig. 2) from a living eye (". . .a living iris" at 6:53-58) or a photocopy (". . .a photograph" at 6:53-58; e.g., fig. 2) of a living eye;

receiving image data of the single image (fig. 1, item 10; e.g., fig. 2) and storing the image data on a memory device (a memory device must exist for the single image to be received and thus stored);

performing band limitation ("quadrature bandpass filters" in 3:52-55; fig. 3; fig. 4) to the whole image data (the qaudrature bandpass filters are applied to the whole image) of the single image (fig. 1, item 10; e.g., fig. 2);

extracting a predetermined feature (fig. 4c to generate the code when fig. 4b Gabor filter above or below 0 creating the Hamming distance) from the band-limited image data; and

recognizing whether the single image (fig. 1, item 10; e.g., fig. 2) has been captured from a photocopy of a living eye based on data of the extracted feature (fig. 6 displays the difference in hamming distance between an authentic iris and a photocopy of an iris).

Regarding **claim 11**, *Daugman* discloses the counterfeit eye discrimination method of claim 10,

wherein in the recognition step,

distributions (fig. 10; fig. 6) of the predetermined feature of images from a living eye ("Authentics" in fig. 6) and images captured from a photocopy of a living eye ("Imposters" in fig. 6) are respectively prepared beforehand,

a distance to data of the extracted feature (fig. 4C to generate the code when fig. 4B Gabor filter above or below 0 creating the Hamming distance) from the feature distribution of the images captured from a living eye and a distance thereto from the feature distribution of the images captured from a photocopy of a living eye are calculated (all of the necessary distances calculations in fig. 6), and

the single image is judged to have an eye belonging to the distribution (fig. 6 with the cross-hatched rate areas), from which the calculated distance is the shorter between a living eye and a photocopy of a living eye (e.g. a Hamming distance of 0.2 is a shorter distance to a probable authentic image, the longer distance would be to an imposter image).

Regarding **claim 12**, claim 10 recites identical features as in claim 12. Thus, references/arguments equivalent to those presented above for claim 10 are equally applicable to claim 12.

Regarding **claim 13**, claim 10 recites identical features as in claim 13. Thus, references/arguments equivalent to those presented above for claim 10 are equally applicable to claim 13.

Regarding **claim 14**, *Daugman* discloses an iris authentication method (fig. 1) comprising the steps of:

performing iris authentication (fig. 1; fig. 1, item 28) based on image data of a photocopy image ("FIG. 2 is a photograph of a human eye" at 3:50-51; fig. 1, item 10) including an eye (fig. 2); and

performing the counterfeit eye discrimination method of claim 1 or claim 10 to the image data when a subject is authenticated as a person himself or herself ("confirming personal identity" in 4:27-29; 13:26-41) in the iris authentication step.

Claim Rejections - 35 U.S.C. § 103

[8] The following is a quotation of 35 U.S.C. § 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Min et al. in view of Zeller et al.

[9] **Claims 2, 4-5, 7-9, 18,** and **22** are rejected under 35 U.S.C. § 103(a) as being unpatentable over *Min et al.* in view of U.S. Pub. No. 2003/0156733 (published Aug. 21, 2003, hereinafter "Zeller et al.").

Regarding **claim 2**, while *Min et al.* discloses the counterfeit eye discrimination method of claim 1, *Min et al.* does not disclose wherein the image processing includes the steps of: performing band limitation to the image data; and extracting a predetermined feature from the band-limited image data, wherein the presence or absence of the static textual roughness is detected using the extracted feature data.

Zeller et al. teaches an authentication method for authenticating printed objects using low pass blurring metrics (¶0070) that includes the steps of:

performing band limitation ("low pass blurring metrics" at ¶0070) to image data (fig. 1, item 110 created from a printer item 104); and

extracting a predetermined feature ("[t]he distribution of the pixel values has two peaks that are stronger in the original than in a print/scan counterfeit" at ¶0076) from the band-limited image data,

wherein the presence or absence of the static textual roughness ("[i]f the counterfeiter has scanned the original and then printed the counterfeit, the result will have more mid-level pixel-valued pixels than the original" at ¶0076; i.e., more mid-level pixel-valued pixels is more static textual roughness) is detected using the extracted feature data.

It would have been obvious to one of ordinary skill in the art at the time the invention was made for the counterfeit eye discrimination method of *Min et al.* to include the steps of: performing band limitation to the image data; and extracting a predetermined feature from the

band-limited image data, wherein the presence or absence of the static textual roughness is detected using the extracted feature data as taught by *Zeller et al.* (on the entire image data of *Min et al.*) to " provide[[s]] an authentication system and related methods for authenticating printed objects. The system uses an information-based metric along with one or more print quality metrics to provide accurate detection or classification of a counterfeit printed object." *Zeller et al.* at ¶0010.

Regarding **claim 4**, *Min et al.* in view of *Zeller et al.* discloses wherein pixel coordinate values (it is inherent every pixel value contains a "coordinate" memory address, as well as pixel coordinate value within the image itself made by the image format used) are used in combination with pixel values in the extraction of the predetermined feature (*Zeller et al.*, "[t]he distribution of the pixel values has two peaks that are stronger in the original than in a print/scan counterfeit" at ¶0076).

Regarding **claim 5**, *Min et al.* in view of *Zeller et al.* discloses wherein a center of a pupil or an iris (*Min et al.* at fig. 2) is used in combination with pixel values (the whole image of *Min et al.* at fig. 2 is used including the pupil and iris for the low pass filtering of *Zeller et al.*) in the extraction of the predetermined feature (*Zeller et al.*, "[t]he distribution of the pixel values has two peaks that are stronger in the original than in a print/scan counterfeit" at ¶0076).

Regarding **claim 7**, *Min et al.* in view of *Zeller et al.* discloses wherein the extraction of the predetermined feature (*Zeller et al.*, "[t]he distribution of the pixel values has two peaks that are stronger in the original than in a print/scan counterfeit" at ¶0076) is performed to a vicinity of an iris region or a pupil region (the whole image of *Min et al.* at fig. 2 is used including to a vicinity of an iris region or a pupil region for the low pass filtering of *Zeller et al.*).

Regarding **claim 8**, *Min et al.* in view of *Zeller et al.* discloses wherein the extraction of the predetermined feature (*Zeller et al.*, "[t]he distribution of the pixel values has two peaks that are stronger in the original than in a print/scan counterfeit" at ¶0076) is performed to a region on or in a vicinity of a line passing through a center of a pupil or a center of an iris (the whole image of *Min et al.* at fig. 2 is used including to a region on or in a vicinity of a line passing through a center of a pupil or a center of an iris for the low pass filtering of *Zeller et al.*).

Regarding **claim 9**, while *Min et al.* discloses the counterfeit eye discrimination method of claim 1, *Min et al.* does not disclose wherein the image processing includes the steps of:

performing frequency analysis to the image data; and extracting a predetermined feature from the frequency-analyzed data.

Zeller et al. teaches an authentication method for authenticating printed objects using low pass blurring metrics (¶0070) that includes the steps of:

performing frequency analysis ("frequency based metrics" at ¶0071) to image data (fig. 1, item 110 created from a printer item 104); and

extracting a predetermined feature ("[i]f the counterfeiter has scanned the original and then printed the counterfeit, the result will have more mid-level pixel-valued pixels than the original" at ¶0076; "blurring may cause distortion of high frequency signal content" at ¶0077) from the frequency-analyzed data ("frequency based metrics" at ¶0071).

It would have been obvious to one of ordinary skill in the art at the time the invention was made for the counterfeit eye discrimination method of *Min et al.* to include the steps of: performing frequency analysis to the image data; and extracting a predetermined feature from the frequency-analyzed data (i.e., to include low pass blurring metrics) as taught by *Zeller et al.* (on the entire image data of *Min et al.*) to " provide[[s]] an authentication system and related methods for authenticating printed objects. The system uses an information-based metric along with one or more print quality metrics to provide accurate detection or classification of a counterfeit printed object." *Zeller et al.* at ¶0010.

Regarding **claim 18**, while *Min et al.* discloses the counterfeit eye discrimination method of claim 1, *Min et al.* does not disclose wherein the image data of the single image include pixel values, wherein a statistical variance of the pixel values conclusively determines the static textual roughness.

Zeller et al. teaches an authentication method for authenticating printed objects using low pass blurring metrics (¶0070) that includes

wherein image data (fig. 1, item 110 created from a printer item 104) of a single image include pixel values,

wherein a statistical variance ("Pixel Variance" at TABLE 1) of the pixel values conclusively determines static textual roughness ("related to the amount of content, and to the degree of blur" at TABLE 1; i.e., the higher the blur, the less static textual roughness).

It would have been obvious to one of ordinary skill in the art at the time the invention was made for the counterfeit eye discrimination method of *Min et al.* to include wherein the image data of the single image include pixel values, wherein a statistical variance of the pixel values conclusively determines the static textual roughness as taught by *Zeller et al.* (on the entire image data of *Min et al.*) to " provide[[s]] an authentication system and related methods for authenticating printed objects. The system uses an information-based metric along with one or more print quality metrics to provide accurate detection or classification of a counterfeit printed object." *Zeller et al.* at ¶0010.

Regarding **claim 22**, while *Min et al.* discloses the counterfeit eye discrimination method of claim 1, *Min et al.* does not disclose wherein the static textual roughness has characteristics indicating association with repetition of a specific intensity pattern on a photocopy.

Zeller et al. teaches an authentication method for authenticating printed objects using low pass blurring metrics (¶0070) that includes

wherein static textual roughness ("related to the amount of content, and to the degree of blur" at TABLE 1; i.e., the higher the blur, the less static textual roughness) has characteristics indicating association with repetition of a specific intensity pattern (fig. 1 item 104; i.e., the specific intensity pattern generated by the original printer) on a photocopy (fig. 1, item 100).

It would have been obvious to one of ordinary skill in the art at the time the invention was made for the counterfeit eye discrimination method of *Min et al.* to include wherein the static textual roughness has characteristics indicating association with repetition of a specific intensity pattern on a photocopy as taught by *Zeller et al.* (on the entire image data of *Min et al.*) to " provide[[s]] an authentication system and related methods for authenticating printed objects. The system uses an information-based metric along with one or more print quality metrics to provide accurate detection or classification of a counterfeit printed object." *Zeller et al.* at ¶0010.

Min et al. in view of Jones et al.

[10] **Claim 15** is rejected under 35 U.S.C. § 103(a) as being unpatentable over *Min et al.* in view of U.S. Pub. No. 2002/0107801 (published Aug. 8, 2002, hereinafter "Jones et al.").

Regarding **claim 15**, while *Min et al.* discloses a counterfeit printed matter discrimination method (fig. 3), characterized by comprising the steps of:

capturing (fig. 1, item 2) a single image (fig. 2) from an iris;

receiving image data of the single image (fig. 2) and storing the image data on a memory device (fig. 1, item 3); and

detecting presence or absence of static textual roughness (fig. 2 absent items LED-L' and LED_R' is the presence of static textual roughness) in the single image (fig. 2) by image processing (fig. 1, item 3; fig. 3, item S7) to the image data; and

wherein the iris is judged to be a counterfeit printed matter (6:58-61 wherein a photograph would be "counterfeit printed matter") when roughness is detected in the image, *Min et al.* does not teach wherein the image is of a bill or valuable paper.

Jones et al. discloses an automated document processing system using full image scanning that teaches wherein the image is of a bill or valuable paper (fig. 4C)

It would have been obvious to one of ordinary skill in the art at the time the invention was made for the image of *Min et al.* to include a bill or valuable paper as taught by *Jones et al.* "to provide a document and currency processing system capable of processing documents utilizing full image scanning and a currency discriminator." *Jones et al.* at paragraph [0003].

Allowable Subject Matter

[11] **Claims 3** and **6** are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

[12] The following is a statement of reasons for the indication of allowable subject matter:

Regarding **claim 3**, while the prior art of record teaches the method-steps of claims 1 and 2 (using low pass filtering on the entire image of *Min et al.* to determine a counterfeit copy by analyzing the static textual roughness of that potential copy), the prior art of record does not teach wherein the predetermined feature is one of or a combination of two or more of moment, central moment, skewness and kurtosis of pixel values.

Regarding **claim 6**, while the prior art of record teaches the method-steps of claims 1 and 2 (using low pass filtering on the entire image of *Min et al.* to determine a counterfeit copy by

analyzing the static textual roughness of that potential copy), the prior art of record does not teach wherein a high-pass filter or a band-pass filter is used in the band limitation. The purpose of *Zeller et al.* is to provide low-pass filtering because "[t]he distribution of the pixel values has two peaks that are stronger in the original than in a print/scan counterfeit" at ¶0076, and not either high-pass filtering or band-pass filtering.

Conclusion

[13] The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US 6081607 A; US 6104812 A; US 6205233 B1; US 6247813 B1; US 6332193 B1; US 6377699 B1; US 20020136435 A1; US 6542624 B1; US 6549118 B1; US 20040049401 A1; US 6785406 B1.

[14] All claims are drawn to the same invention claimed in the earlier application and could have been finally rejected on the grounds and art of record in the next Office action if they had been entered in the earlier application. Accordingly, **THIS ACTION IS MADE FINAL** even though it is a first action in this case. See MPEP § 706.07(b). Applicant is reminded of the extension of time policy as set forth in 37 C.F.R. § 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 C.F.R. § 1.136(a) will be calculated from the mailing date of the advisory action. In no, however, event will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

[15] Any inquiry concerning this communication or earlier communications from the examiner should be directed to DAVID P. RASHID whose telephone number is (571)270-1578 and fax number (571)270-2578. The examiner can normally be reached Monday - Friday 7:30 - 17:00 ET.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bhavesh Mehta can be reached on (571) 272-7453. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/David P. Rashid/
Examiner, Art Unit 2624

/Bhavesh M Mehta/
Supervisory Patent Examiner, Art Unit 2624

David P Rashid
Examiner
Art Unit 26244